



Factor IX Monoclonal Antibody

Catalog No	YP-mAb-10614
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	F9 Factor IX
Immunogen	Synthesized peptide derived from Factor IX at AA range: 412-461
Specificity	Factor IX Monoclonal Antibody detects endogenous levels of Factor IX
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	F9;Factor IX;EC:3.4.21.22;Coagulation factor IXa light chain;Coagulation factor IXa heavy chain;F9 Factor IX;Coagulation factor IX (EC 3.4.21.22) (Christmas factor) (Plasma thromboplastin component) (PTC) [Cleaved into: Coagulation factor IXa light chain;Coagulation factor IXa heavy chain]
Observed Band	52kD
Calculated Molecular Weight	52kD
Cell Pathway	Secreted .
Tissue Specificity	Detected in blood plasma (at protein level) (PubMed:3857619, PubMed:8295821, PubMed:2592373, PubMed:9169594, PubMed:19846852). Synthesized primarily in the liver and secreted in plasma.
Function	catalytic activity:Selective cleavage of Arg- -Ile bond in factor X to form factor Xa.,disease:Defects in F9 are the cause of recessive X-linked hemophilia B (HEMB) [MIM:306900]; also known as Christmas disease.,disease:Mutations in position 43 (Oxford-3, San Dimas) and 46 (Cambridge) prevents cleavage of the propeptide, mutation in position 93 (Alabama) probably fails to bind to cell membranes, mutation in position 191 (Chapel-Hill) or in position 226 (Nagoya OR Hilo) prevent cleavage of the activation peptide.,domain:Calcium binds to the gamma-carboxyglutamic acid (Gla) residues and, with stronger affinity, to



another site, beyond the Gla domain.,function:Factor IX is a vitamin K-dependent plasma protein that participates in the intrinsic pathway of blood coagulation by converting factor X to its active form in the presence of Ca^{2+} ions, phospholipids, and factor VIIIa.,miscellaneous

Background

This gene encodes vitamin K-dependent coagulation factor IX that circulates in the blood as an inactive zymogen. This factor is converted to an active form by factor XIa, which excises the activation peptide and thus generates a heavy chain and a light chain held together by one or more disulfide bonds. The role of this activated factor IX in the blood coagulation cascade is to activate factor X to its active form through interactions with Ca^{2+} ions, membrane phospholipids, and factor VIII. Alterations of this gene, including point mutations, insertions and deletions, cause factor IX deficiency, which is a recessive X-linked disorder, also called hemophilia B or Christmas disease. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar proteolytic processing. [provided by RefSeq, Sep 2015],

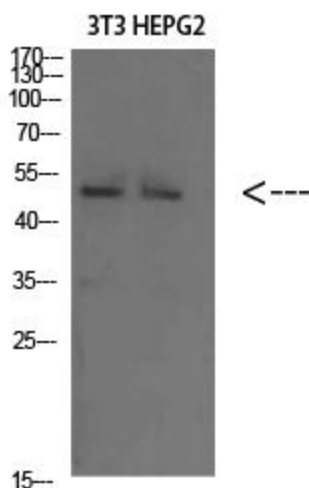
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using Factor IX Monoclonal Antibody